

Space News Roundup

Vol. 22 No. 19

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National Aeronautics and Space Administration

JSC plans Shuttle Contracts Consolidation

JSC has initiated steps to consolidate virtually all existing contracts supporting Space Shuttle operations at the Center into a single, major contract.

The objective of the contract, to be awarded early in Fiscal Year 1986, is to develop a more efficient and cost-effective approach to Shuttle operations, according to JSC Director Gerald D. Griffin.

The contract "will essentially consolidate all of the STS operational support activities currently performed by a number of different contractor organizations as well as some routine functions currently performed by our civil service staff," Griffin said in a center-wide announcement which went to employees last week. Some 16 different contractor organizations now provide services for Shuttle operations.

"It is currently planned," Griffin said, "that the scope of the contract will include, but may not necessarily be limited to, activities in the following areas: (1) maintenance and operations of such STS facilities as the Mission Control Center, crew trainers and simulators, flight design and crew activity planning systems, the Shuttle Avionics Integration Laboratory and the STS portion of the Central Computing Facility; (2) flight preparation activities including flight planning/flight data generation, Orbiter software reconfigurations, simulation preparations, and facilities reconfigurations; (3) direct mission support (simulations and flight); and (4) sustaining engineering support for the above activities."

Griffin said most JSC organizations will not be directly affected by the new approach. "However," he said, "those individuals and organizations directly affected will, in the near future, be briefed more fully on the details of these plans by members of their management."

JSC officials also will be meeting early in November with companies likely to be affected by the contract consolidation.

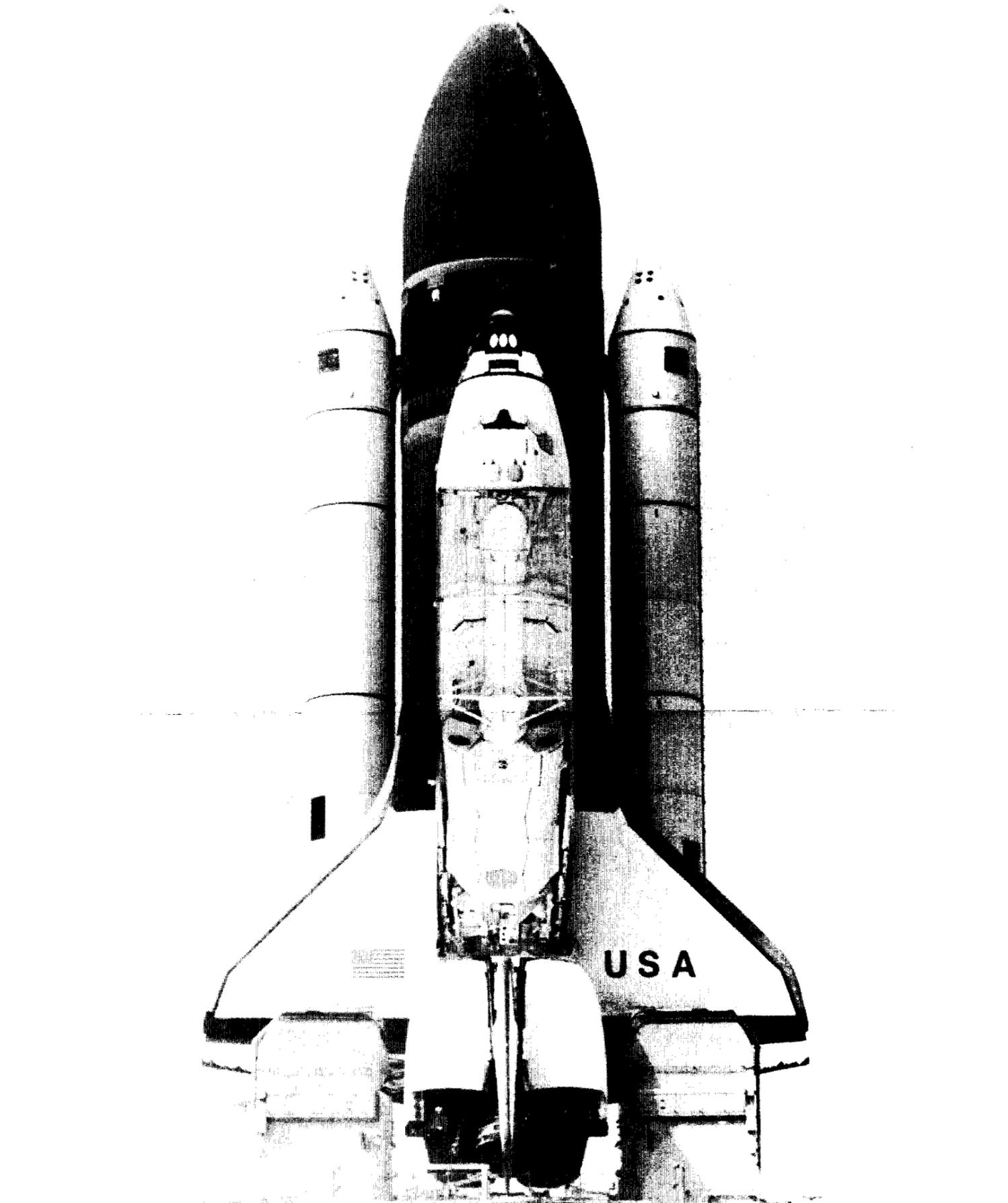
TDRS-1 now at final location

Two maneuvers successfully conducted Oct. 16 and 17 placed the first Tracking and Data Relay Satellite at its permanent location at 41 degrees west longitude.

The satellite, launched during STS-6, is now at its permanent location over the Atlantic Ocean just off the northeast coast of Brazil along the Equator.

Engineers from NASA, TRW and SPACECOM conducted the two final maneuvers.

The communications satellite, designated on the tracking map in Mission Control as TDRS-East, did not reach geosynchronous orbit after its deployment from the Shuttle due to a malfunction of the Inertial Upper Stage booster. Following nearly two months of delicate maneuvers in which only six one-pound thrusters were used, the spacecraft was placed into geosynchronous orbit on June 29 at 67 degrees west longitude.



What appears to be an X-ray photograph shows the European Space Agency's Spacelab-1 installed in the cargo bay of the Orbiter *Columbia*. The double exposure was taken by Klaus Wilkens of Technicolor Government Services at the

Kennedy Space Center. The STS-9 stack is now back in the Vehicle Assembly Bldg. where one of the solid rocket boosters recently judged unfit for flight is being replaced. Launch date is now scheduled for no earlier than Nov. 28.

NASA creates institute to study syndrome

NASA has created a new project and research institute at JSC to focus efforts in investigating some of the potential problems astronauts have in adjusting to the weightless environment of space.

The Space Biomedical Research Institute will function as part of the Space Adaptation Project within the National Space Transportation Systems Program Office here. One element of the Institute will be a Division of Space Biomedicine run by the Universities Space Research Association, with former astronaut and U.S. Senator Harrison Schmitt as acting director.

That division will coordinate the efforts of scientists from univers-

ities, pharmaceutical companies, commercial organizations and foreign countries, while other organizational units within the Institute will coordinate the work of scientists from JSC, the Ames Research Center, the Department of Defense, the National Institute of Health, the National Science Foundation, the Jet Propulsion Laboratory and others. Dr. Sam Pool, Chief of the Medical Sciences Division, will serve as Acting Director of the Institute.

Space Adaptation Project Manager Elena Huffstetler said the project, although located in Houston, is a NASA-wide effort, and is designed to draw together the work of researchers all over the country.

Policy-level control of the project will come out of the Life Sciences Division at NASA Headquarters.

The focus of the project is on both clinical and applied research into the Space Adaptation Syndrome (SAS), the name NASA applies to a variety of physical adjustments astronauts sometimes experience when first exposed to weightlessness. Much of the basic research into vestibular and other physiological reactions to weightlessness and disorientation is being performed at the Ames Research Center. Efforts on-site at JSC, for the most part located in the facilities of Bldg. 37, will focus on the clinical approach - how to help alleviate difficulties encountered by spaceflight crews with an eye

toward Space Shuttle and space platform operations.

Technical objectives of the project fall into four basic areas: countermeasures (prevention), countermeasures (treatment), prediction and choice of countermeasures, and basic mechanisms. Along those lines, a variety of bodily mechanisms and avenues of research are being investigated.

Project objectives are to focus specifically on the operational aspects of the syndrome, to improve countermeasures to the highest reliability, to develop accurate predictors of susceptibility to SAS, and to gain a greater understanding of the physiological mechanisms underlying the possible solutions to SAS.

Space News Briefs

IRAS discovers fifth comet

The Infrared Astronomical Satellite (IRAS) has another comet discovery to its credit, the fifth since the orbiting infrared observatory was launched earlier this year. The object has been designated Comet IRAS 19830, and is the first comet to have been discovered and have its orbit successfully predicted by an orbiting observatory. Two sightings in July and September allowed scientists at the IRAS Preliminary Analysis Facility in Chilton, England to predict future positions of the comet along its parabolic orbit. This information was sent to the operators of small telescopes around the world, which usually are restricted by the amount of sky they must search in order to sight small, faint objects. On Sept. 11, using the predicted position, Alan Gilmore and Pamela Kilmartin at Mt. John Observatory in New Zealand sighted the object and it was given an official comet designation. The comet will pass closest to the Sun in November, but even then its orbit will be beyond that of Mars and it will not be visible to the naked eye.

Ariane launches INTELSAT V F7

The Ariane L7 mission successfully launched the satellite INTELSAT V F7 into an 8.58 degree orbit October 19. The launch took place at the site in Kourou, French Guiana at 45 minutes and 36 seconds after midnight, GMT. The European Space Agency said the staging of the Ariane rocket worked well, and that all other systems also performed nominally.

Bulletin Board

Co-ops updating housing list

As NASA's one major source of new administrative and engineering talent, cooperative education students are an important Agency resource. For all of the payoffs of the co-op experience, however, shuttling back and forth between school and work every few months is a hectic lifestyle. One of the major headaches co-ops encounter is housing, and that's why several of JSC's co-op students are updating and computerizing the housing list, and they could use your help. The idea is to have a permanently up-to-date list of houses, apartments and spare rooms in the area. Work periods generally last from two to six months, with the heaviest influx of co-ops taking place in the summer months. If you are interested in renting a house or apartment to several co-ops, or a spare room, please call Laura Staples at x2495, Sheri Schiff at x4193 or Eddie Lindsey at x3071. They'll ask you a few questions about the lodgings, log the information on a computer and make sure that all co-ops get a copy.

Lunar power station discussion set

Lunar-based power stations will be the topic of an AIAA noontime discussion from 11:30 a.m. to 12:30 p.m. Nov. 15 in the Bldg. 30 Auditorium. Dr. David Chriswell of the University of California will be the featured speaker in this talk sponsored by the Houston section of the American Institute of Aeronautics and Astronautics. The discussion is open to all at no charge. For more information, call Jim Visentine at x4564 or Richard Hermling at x4521.

Astronomical Society to review asteroid project

The JSC Astronomical Society will feature Dr. David W. Dunham of CSC at a Nov. 11 meeting where the two major efforts to measure the shape and size of the asteroids Pallas and Nemausa will be discussed. The summary will highlight the efforts of over 300 amateur and professional astronomers which was coordinated in Texas by the JSCAS. The meeting will be held beginning at 7 p.m. Nov. 11 at the Lunar and Planetary Institute. Plans for scientific expeditions to Papua, New Guinea for a solar eclipse in November 1984 will be described also, as will the return of Comet Halley in 1986 and the annular eclipse of the Sun next May 30 in Louisiana.

Galveston Marines planning celebration

The officers and men of the Fourth Platoon, Company B, Fourth Assault Amphibian Battalion - or better yet, the Galveston Marines - are inviting Marines, former Marines and the general public to help them celebrate the 208th anniversary of the U.S. Marine Corps. The celebration takes place beginning at 6:30 p.m. Nov. 11 at the Moody Center in Galveston. For more information, call 766-6321.

Sailing Club being formed.

A JSC Sailing Club is being formed for those interested in sailing but who do not wish to own a boat at this time. Sailing lessons will be provided and sailboats ranging from 28 to 41 feet will be available through a charter service on Galveston Bay at a substantial discount, according to Club organizer Jim Peacock. The initial meeting to kick off this new JSC club will be held from 5:15 to 7:15 p.m. Nov. 1 at the Rec Center lounge. For more information, call Peacock at 488-4920.

Workload prohibits crew autographs

Crew members of the STS-8 mission have announced with regret that they are unable to meet the large number of requests for autographs on postal covers taken into orbit during their flight. Over a quarter of a million postal covers were flown, and with their heavy workload and other duties, the crew asks that their friends at JSC and in the community understand their inability to comply with the many autograph requests.



Graduates of the tenth Worker-Trainee Opportunities (WTO) Program are shown here during ceremonies last month. Pictured here, from left to right, are Patti Taylor, Karen Simmons, Cynthia Davis, Beverly Jackson, Freda Lowe (the WTO Coordinator/Instructor), Sharon Lactson, Yvonne Simon, Doris Lewis and Jacqueline Wilson. Not pictured is Mary Jo Watson.

For the second year in a row, films produced at JSC have been honored with the most prestigious award given by the Council on International Non-theatrical Events, or CINE. The films, one a review of the Orbital Flight Test program and the other an STS-7 post-flight film produced by the crew, were both honored in October with Golden Eagle Awards. The Golden Eagle is among the highest award any documentary film can earn worldwide. "Opening New Frontiers: Orbital Flight Tests of the Space Transportation System," was produced at JSC by Media Services Corp. The film features an original electronic score by **Craig Jackson** of Media Services. It was produced and written by **Margaret E. Hastings**, mixed by **John Hawsey** and edited by **Don Pickard Jr.** The STS-7 post-flight press conference film, with sound, was essentially produced by the crew, who selected film clips to be used at their press conference and provided the narration. Film editing was done by Pickard.

rate of Cadwalder's program is 93 percent overall. JSC employees interested in additional information about quit smoking clinics and other wellness programs offered in the Houston area should call Horton at x6130 or visit his office in Room 223 of Bldg. 8.

Shop Talk

Length of service awards were presented recently to a number of JSC employees. Those receiving 25-year awards included William E. Jobe, Eugene B. Stewart, Betty M. Hall, Donald M. Perry Jr., Roland G. Dales, George W. Morgan, Charles R. Lewis, Oscar K. Houck, Bob Hendrix, James Anthony Taylor, Carolyn B. Lowrimore, Paul A. Svejovsky, Billy V. Zuber, Maynard C. Dalton,

Dean C. Glenn, William L. Richards, Benny Byron Sprague, Marianne C. Campbell, James C. Currie, Earl Rubenstein, Bobby Van Gray, Harry M. Porter, Fredric C. Toole III, James B. Jackson Jr., William G. Sebastian, Daniel Taylor Lockard, Robert David Langley, Richard B. Davidson, Gary D. Meester, Ben R. Hand, Coy D. Martin, Robert O. Hill, Harold L. Prior and Malcolm C. Smith Jr. Those receiving 30-year awards included Leland W. Bethers, John E. McIver, Everett L. Rogers, William B. Wilson, Tommie L. Walton, Norris L. Taylor, Billy G. Whatley, Sylvester Barrett, Leon F. Atkins, Fred D. Rowell, Rees H. Underhill, Frederick J. Southard Jr., Robert Cohen, Leon H. Ballinger, Thomas J. Adams Jr. and John C. Stonesifer. Thirty-five year awards were presented to Chester H. Jenkins, Glory L. Allahverani, Robert K. Peck, William C. Long and John W. Holland Jr. One 40-year length of service award was presented, to Edward E. Guin of the Ground Data Systems Division.



There's no mercy in the Astronaut Office. Lt. Col. Robert C. Springer, Class of '80, recently returned from a longer than usual TDY assignment and was greeted by this new decor in his office, which both celebrated his return and mourned his long absence.

Some 60 NASA employees and contractors, tired of trying to quit smoking without making it, participated in JSC's first Quit Smoking Seminar, sponsored by the Employee Assistance Office. The seminar was led by **Dr. Roger Cadwalder**, D.P.H., who himself quit smoking during completion of post-doctoral research in addiction behavior at the University of Texas Medical Center. "A person can't just quit smoking because he or she wants to," Cadwalder said. "Smoking is just like any other disease. You can't get over it just because you think you ought not to have it. You have to get at the underlying psychological problems that go with smoking. It's a full-blown addiction." **Gene Horton**, JSC's Employee Assistance Administrator, said the success



Who says MOD briefings are dull these days? It's that little extra that helps spark the interest, as Jerry Johnson illustrates here in full regalia for his Spacelab in-flight maintenance class to the EECOMs.

Telescope renamed after Hubble

The Space Telescope, America's future orbiting optical astronomical observatory, has been renamed the Edwin P. Hubble Space Telescope in honor of one of the nation's foremost astronomers.

It is scheduled for launch aboard the Space Shuttle in 1986. Dr. Burton Edelson, NASA's Associate Administrator for Space Science

and Applications, announced the renaming.

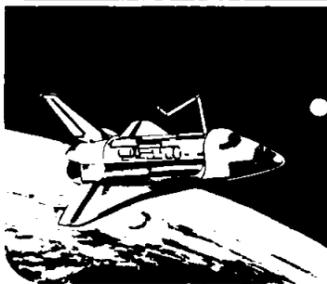
Hubble's astronomical research over three decades profoundly changed our understanding of the basic structure of the universe.

Before Hubble, scientists held differing views on the extent and

dimensions of the universe. It was believed that our solar system was part of a larger system which contained all the stars visible to the naked eye. Astronomers were uncertain whether the faint spiral nebulae were also part of our Milky Way system or themselves distant universes each composed of countless stars.

NASA
Lyndon B. Johnson Space Center

Space News Roundup



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Editor

Brian Welch

Meet some outstanding secretaries

Since 1973, JSC has had a formal program to recognize some of the most important people at the Center — the secretaries who answer the phone, type the letters, make the appointments and do a hundred other things without which the offices on-site could not operate effectively.

Outstanding Secretary Awards are presented each month to those people who have made "exceptional contributions to the effective operation of the Johnson Space Center through professional competence and personal dedication." This honorary award is presented by the Center Director and consists of an etched Fotofoil desk plaque and a cash award of \$500.

To be eligible for the award, the nominee must be a career or career conditional JSC employee performing as a secretary, and whose contributions warrant this special recognition. Secretaries, clerk stenographers, clerk typists and clerks are all eligible for consideration. The nominees must have a minimum of one year's experience with the Center, but the most important qualities they must demonstrate include a high degree of personal integrity, judgment, responsibility, the ability to maintain a rapport with their peers and superiors and excellence in skills.

Candidates may be nominated by their supervisors as a result of special one-time accomplishments of for outstanding efforts during the previous year. A committee chaired by JSC Associate Director Henry E. Clements meets quarterly and selects three recipients each time.

Outstanding Secretaries normally are featured in the *Roundup* every month or so, but the press of news in the past few months has been such that these stories have not appeared with any regularity. We hope to rectify these omissions with this feature on some of the truly special people who work at JSC.

Dorothy Hailey

As Secretary to the Manager of the Orbiter Project Control Office, Dorothy Hailey literally had to hit the ground running when she assumed the tasks required of that position.

One of her primary contributions is the planning and management of work, meetings and the scheduling of priority items, Orbiter Project Control Office Manager Tom Kloves said. "Our office environment is a high tempo one, marked by short deadlines, sensitive budget and contractual matters, and by a multitude of high-level interfaces with JSC management, NASA Headquarters and the prime contractor," Kloves said. "Mrs. Hailey's tact, her pleasant disposition and her professional attitude have enabled her to cope with these environmental pressures and to reflect favorably on her organization."

In recognition of her contributions, Hailey was presented the April Outstanding Secretary Award.



Dorothy Hailey accepts her award from Center Director Gerald Griffin.



Georgie Huepers poses with James Bilodeau and Mr. Griffin.



Lorraine Halsey and Mr. Griffin during the June presentation.



Petra Padron with Mr. Griffin during her award presentation.



Janie Proctor poses with Mr. Griffin, Ken Gilbreath and Joe Pouzar.

Georgie Huepers

The Outstanding Secretary for May, Georgie Huepers works for the Chief of the Training Division and has been the Division Secretary since 1970. In that time, approximately 1,100 students have participated in Shuttle training programs. Defining and formulating these training programs requires the combined expertise of about 90 engineers supported by a team of eight secretaries and clerical personnel.

"She has been an integral member of the support team since 1970," said Training Division Chief James Bilodeau. "Georgie's finished products routinely are of exceptional caliber, in spite of having to decipher from very rough drafts. She completes each assignment with minimum instruction, relying primarily on her own individual initiative and judgment to effect necessary changes.

"For more than 10 years, she has consistently performed in an outstanding manner. She excels in all work assignments," Bilodeau said.

Lorraine Halsey

The Outstanding Secretary for June, Lorraine Halsey serves as secretary to the Planning and Control Office.

The job calls for a great many administrative tasks. She is the point of contact on all formal technical and administrative contract direction for the IBM and Ford Mission Control Center support contracts. These usually take the form of around 50 information request forms each week. She also has developed a cross-referencing and status system which enables the various documents to be located quickly and easily. She must also prepare various special reports, such as the Award Fee Evaluation Committee formal reports and presentations for the Contract Technical Manager's presentations to senior management.

"Mrs. Halsey's ability to work with people, recognize and establish priorities, and organize her office routine have contributed to her successful accomplishment of a heavy daily workload," Planning and Control Office Chief John Williams said. "She is friendly, competent and very reliable."

Petra Padron

"Pete" Padron serves as secretary in the Personnel Programs Office, and was chosen as the Outstanding Secretary for July. Her accomplishments are best stated by Personnel Programs Office Chief Robert Hall:

"When 'Pete' Padron came to work in my office in October of 1981, she was my third secretary in two years. I was almost resigned to the fact that I would be attending farewell luncheons and selecting new secretaries on a disconcertingly regular basis," Hall said. "Then Pete entered. She was fully productive and totally in control in record time. The large volume of work was handled competently and

with remarkable ease. Rather than looking for ways to off-load duties, I am now concerned with finding new assignments to challenge her abilities. She has a straight forward approach to her work and an ability to reduce a complicated assignment to its simplest components.

"In addition to holding down a full-time job and maintaining her status as a wife and mother, Pete finds the energy to attend night classes at San Jacinto College. She is hard working, competent, ambitious and genuinely and outwardly enthusiastic about the space program. She is an asset to this organization and richly deserving of special recognition."

Janie Proctor

The Outstanding Secretary for August, Janie Proctor is secretary to the the Plant Engineering Division office. PED Chief Joe Pouzar described her this way:

"Outstanding: superior to others; excellent — Janie Proctor fits the definition. Her remarkable sense of organization and innate ability to zero in on the relative priority of a situation have been of great value. The Plant Engineering Division is in the process of completely revising its technical and administrative procedures using automated equipment, and Ms. Proctor is one of the key people in developing these procedures for the division. "Her excellent skills were extremely beneficial to the success of the source evaluation board for the grounds maintenance contract where she provided secretarial support to the evaluation committee. Her professional attitude toward her work product and her insistence on the excellence of that product are sincerely appreciated," Pouzar said.

Lynn Ross

The Outstanding Secretary for September, Lynn Ross is secretary to the Deputy Director and Assistant Director of Administrative and Program Support. "She is extremely competent, conscientious and demonstrates a high degree of initiative in her work," said Clinton Taylor, Deputy Director of Administration and Program Support.

"Aside from her superior secretarial skills, Lynn is always willing to accept additional responsibilities and has demonstrated her willingness to help wherever she is needed. Starting with STS-2, and continuing for each subsequent mission and simulation, she has worked the third shift as part of the administrative support function. Even though this means she has to work from midnight to 8 a.m., she has continued to work her regular shift with her usual efficiency," Taylor said.

"She is dedicated and competent, and highly deserving of recognition," he said. (Presentation of the award was made in mid-October, but no photograph of the presentation was available at *Roundup* press time.)

NASA announces opportunities for X-ray observatory

NASA has released an "Announcement of Opportunity" to invite scientists around the world to propose telescopic instruments and ways they could be used on a proposed X-ray observatory in space.

Known as the Advanced X-Ray Astrophysics Facility, or "AXAF," and currently under study at NASA's Marshall Space Flight Center, this orbiting telescope could be launched by the early 1990s.

Participating scientists from universities, corporations and other institutions around the world will be separated into three categories under the announcement.

"Instrument Principal Investigators" will describe to NASA the

kinds of instruments they would want incorporated into the observatory.

"Telescope Scientists" will propose the scientific investigations they would want carried out using X-ray telescope and ensure that the telescope and its related assemblies would be compatible with the scientific requirements of the mission. They will also provide scientific support during integration and calibration activities and assist in planning mission operations.

"Interdisciplinary Scientists" will maintain a broad and critical scientific overview of the development of the observatory and provide advice on new developments in

related scientific fields that could have a potential effect on the objectives of the telescope.

A special NASA-chartered review group of peer scientists will evaluate the proposed instruments and their uses before presenting their findings to NASA. The agency will then select the instruments for the observatory after determining how they will be employed.

Interested scientists met at the Marshall Center on Oct. 3 to learn more about the AXAF program and the results of studies conducted over the past several years. This meeting provided them with necessary background to prepare their proposals. The scientists had until Oct. 14 to file an "intent to pro-

pose" an instrument idea to NASA, will have and until Feb. 17, 1984 to submit the full details of the suggested instruments.

The observatory would be the latest in a series of orbiting X-ray instruments that date back to the Uhuru satellite launched in 1970.

The advanced facility, weighing about 10 tons and measuring 14 by 43 feet, would provide a substantial leap in X-ray astronomy. The observatory would be used to study X-ray emissions from essentially all known astronomical objects, ranging from nearby stars to quasars at the end of the universe.

The X-ray telescope facility would succeed HEAO-2, the second High Energy Astronomy Observatory

launched in November 1978. This earlier observatory obtained valuable data and discovered many previously undetected X-ray sources. The HEAO-2 results raised new scientific questions that AXAF, with up to 100 times the sensitivity of HEAO-2, will possibly be able to answer.

HEAO-2 successfully completed its mission in April 1981 and has since fallen from orbit and been destroyed in the upper atmosphere.

NASA proposes to launch the advanced X-ray facility in the Space Shuttle and deploy it in a 320-mile-high orbit, where it would be periodically maintained over its expected 15-year life span.

Gilruth Center News

Call x3594 for more information

Country western dance - This class is available in November for advanced and beginning dancers. The beginners' class begins Nov. 7 and will run from 8:45 to 10:15 p.m. The advanced class, which also begins Nov. 7, runs from 7:15 to 8:45 p.m. The classes run for eight weeks.

Ladies weight training - This popular course begins Nov. 7 and runs on Mondays and Wednesdays from 7 to 8 p.m. for six weeks. The cost is \$20 per person and the class size is limited.

Weight loss class - This course is designed to help change the eating and thinking habits of people who have trouble keeping the weight off. Nutrition, exercise and behavioral patterns will be stressed. The course begins Nov. 29 and runs from 6 to 8 p.m. on Tuesdays for six weeks. The cost is \$20 per person.

Word processing - Learn all about Word Star in this basic course which begins Nov. 2 and runs through Nov. 21. Hands-on experience with various machines will be provided. The class meets from 7 to 10 p.m. on Mondays and Wednesdays. The cost of \$154 per person includes rental for the word processors and class materials.

Guitar lessons - This class will focus on simple songs, chord strums and melodies. Beginners meet beginning Nov. 14 from 7 to 8 p.m. for six weeks. The intermediate class begins Nov. 14 from 8 to 9 p.m. and also runs for six weeks. The cost is \$25 per person.

Defensive driving - Learn how to drive safely and qualify for a 10 percent reduction in your insurance rate for the next three years. This class is held from 8 a.m. to 5 p.m. Nov. 19. The cost is \$22 per person and the class size is limited.

Dancercise - This class will gradually get you into shape over a six-week program beginning Nov. 15. The class meets Tuesdays and Thursdays from 5:15 to 6:15 p.m. and the cost is \$25 per person.

Mens weight training - This class meets Tuesdays and Thursdays beginning Nov. 8 from 8:30 to 9:30 p.m. The cost of the four-week course is \$20 per person.

Cookin' in the Cafeteria

Week of October 31-November 4, 1983

Monday: Chicken & Rice Soup; Texas Hots & Beans, BBQ Ham Steak, Steak Parmesan, Beef & Macaroni (Special); Green Beans, Carrots, Au Gratin Potatoes. Standard Daily Items: Roast Beef, Baked Ham, Fried Chicken, Fried Fish, Chopped Sirloin. Selection of Salads, Sandwiches and Pies.

Tuesday: Tomato Soup; Potato Baked Chicken, BBQ Spare Ribs, Mexican Dinner (Special); Squash, Broccoli, Ranch Beans, Spanish Rice.

Wednesday: Seafood Gumbo; Liver & Onions, Baked Turbot, BBQ Ham Steak, Baked Meatloaf w/Creole Sauce (Special); Beets, Brussels Sprouts, Green Beans, Whipped Potatoes.

Thursday: Beef & Barley Soup; Chicken & Dumplings, Corned Beef w/Cabbage. Smothered Steak w/Cornbread Dressing (Special); Spinach, Cabbage, Cauliflower au Gratin, Parsley Potatoes.

Friday: Seafood Gumbo; Pork Chop w/Yam Rosette, Creole Baked Cod, Tuna & Salmon Croquette (Special); Brussels Sprouts, Green Beans, Buttered Corn, Whipped Potatoes.

Week of November 7-11, 1983

Monday: Cream of Celery Soup; Braised Beef Ribs, Chicken a la King, Enchiladas w/Chili, Italian Cutlet (Special); Navy Beans, Brussels Sprouts, Whipped Potatoes. Standard Daily Items: Roast Beef, Baked Ham, Fried Chicken, Fried Fish, Chopped Sirloin. Selection of Salads, Sandwiches and Pies.

Tuesday: Beef & Barley Soup; Turkey & Dressing, Country Style Steak, Stuffed Cabbage (Special); Corn Cobbette, Okra & Tomatoes, French Beans.

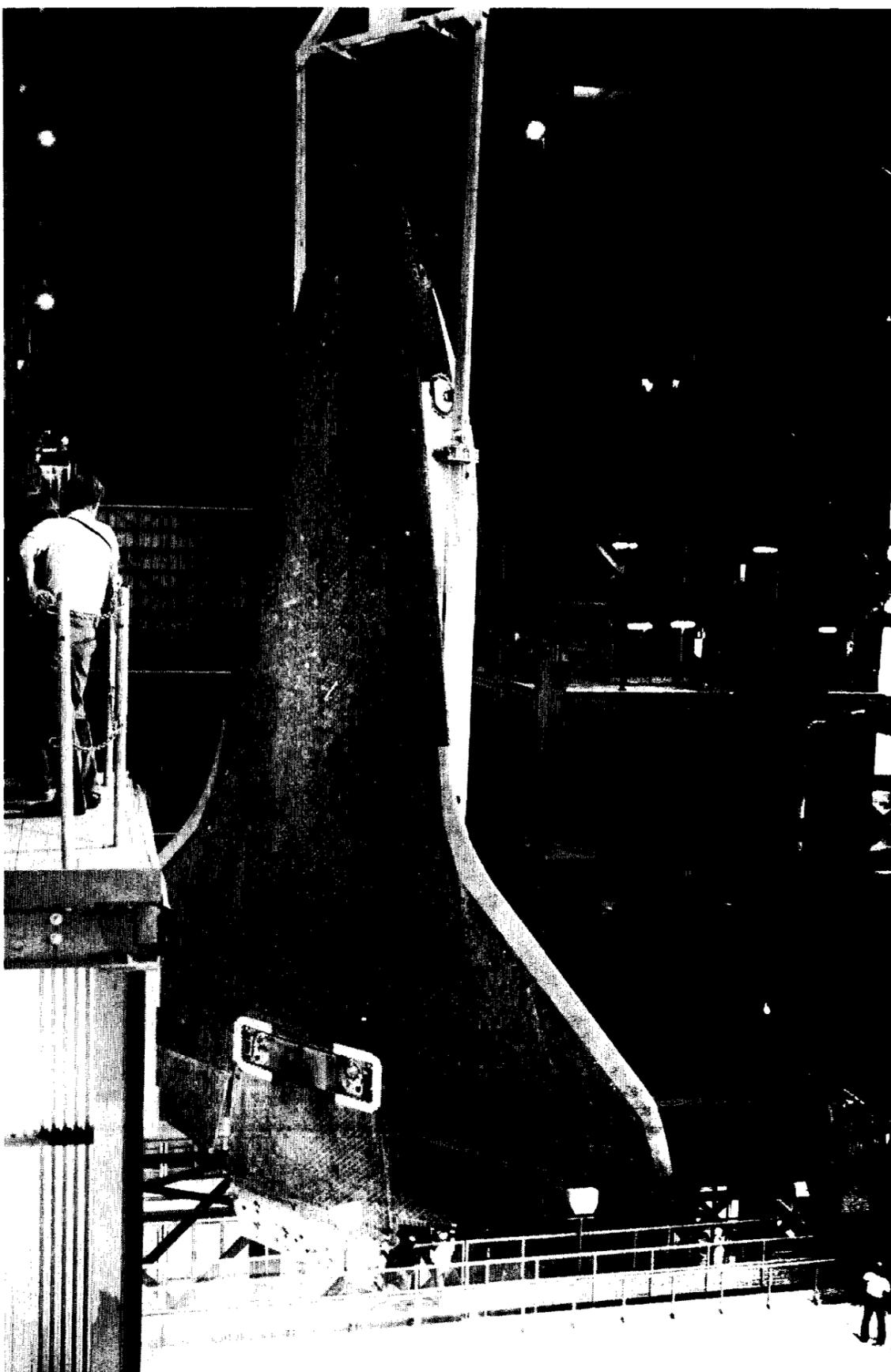
Wednesday: Seafood Gumbo; Catfish w/Hush Puppies, Roast Pork w/Dressing, Chinese Pepper Steak (Special); Broccoli, Macaroni & Cheese, Stewed Tomatoes.

Thursday: Cream of Tomato Soup; Beef Tacos, BBQ Ham Slice, Hungarian Goulash, Chicken Fried Steak (Special); Spinach, Pinto Beans, Beets.

Friday: HOLIDAY.



People Helping People
The United Way



The Columbia is shown here in the Vehicle Assembly Bldg. at the Kennedy Space Center during demating earlier this month. Launch of the Orbiter for the STS-9 Spacelab mission is now set for no earlier than Nov. 28.

Roundup Swap Shop

Ads must be under 20 words total per person, double spaced, and typed or printed. Deadline for submitting or cancelling ads is 5 p.m. the first Wednesday after publication. Send ads to AP 3 Roundup, or deliver them to the Newsroom, Building 2 annex. No phone-in ads will be taken. Swap Shop is open to JSC federal and on-site contractor employees for non-commercial personal ads.

Property & Rentals

For rent: One or two rooms in new house. Call 538-3273 after 5 p.m.

For lease/rent/sale: Kirkwood 3-2-2, near Dobie High School, fireplace, \$575/mo. Call 941-3221 or 481-0400.

For sale/lease: One BR Pebblebrook condo, completely furnished, fireplace, microwave, W/D. Call Rhoades, x5561 or 486-7380.

For sale: League City lot, 68' x 170', all utilities, \$7,500, terms. Call 1-585-8162.

For sale: Pipers Meadow 3-2-2, fireplace, ceiling fans, fenced, extras, low equity, assume fixed FHA or new loans, mid 70s. Call 486-8657 after 5 p.m.

For sale: Mobile home, 14' x 76', 2-2, equity and assume loan, \$17,000. Call Marc, x6393 or 466-6626 after 3:30 p.m.

For lease: University Green patio home, 3-2-2, minutes from NASA, asking \$900. Call 486-0063.

For sale: 2 BR condo in Austin, on UT shuttle bus route, pool, private balcony, ceiling fan, all kitchen appliances, \$53,400. Call 482-7910.

For rent: Galveston By-The-Sea condo, 2 BR, furnished, for rent by day (2 minimum) weeks or month. Call Clements, 474-2622.

For sale: Forest Bend townhome, 2-1.5-2, large kitchen, ceiling fans, just repainted, utility area, fenced patio, no hurricane damage, does not flood, \$49,500. Call 488-9710 or 996-9070 after 5 p.m.

For rent: El Lago 4-2.5-2, fireplace, built-ins, \$800 plus deposit. Call 424-9398.

Cars & Trucks

1982 Capri, 4 cyl., 5 spd., AC, AM/FM/cassette, all power options, cruise, tilt and more, \$6,100. Call BJ, x5644 or 538-2181.

1982 Ford midsize Ranger pickup, 4 cyl., std., PB, PS, AC, dual tanks, long bed, \$6,000. Call Kenneth, x3175 or 470-9393.

1974 Audi Fox, needs work but runs, make offer. Call 488-8013 evenings.

1975 Triumph TR-6 convertible, 60K miles, AM/FM/cassette, runs great, \$4,500. Call 488-8013 evenings.

1979 Ford LTD Country Squire, AC, PS, PB, DFRS, power locks, AM/FM, cruise, luggage rack, \$4,300. Call Lonnie, x3421 or 480-2348.

1975 Mustang II Ghia, PS, PB, AC, AM, automatic, new brakes, tires, battery and muffler, \$2,000. Call Roy, x3591.

1971 Pinto, good shape, \$550. Call Kelly, x6421.

British Leyland Land Rover, 109 LWB, 6 cyl., power brakes, CB, FM, many extras and spares, excellent condition, 78K miles, \$4,900. Call 334-5323.

1978 MG Midget, excellent condition, new top, wire wheels, \$2,750. Call Anderson, x7204 or 485-3025.

1981 Chevy Custom Van, great condition, many extras, new tires, \$9,500. Call 488-3377 after 5 p.m.

1979 Honda Accord LX, excellent condition. Call Sashi Menon, x3929 or 482-9476.

Boats & Planes

For sale: Single seat homebuilt Quick-

ie, 50% complete, most parts to finish, \$3,500. Call 486-8657 after 5 p.m.

Cycles

1974 Yamaha Enduro, running when stored 9 mo., \$450. Call Beck, x2071.

Yamaha GTMX 80cc, immaculate condition, \$295. Call Larry Bell, x3441 or 482-6357.

Yamaha 360 MXA Motocrosser, showroom condition, \$1,200. Call Roy, x3591 or 488-6326 after 5 p.m.

1981 Suzuki GN400, 9K miles, excellent condition, \$800. Call Robert, x2113.

1982 Honda CM450E, 4K miles, excellent condition, \$1,300 or \$300 equity and take up payments. Call Steve, x2113 or 485-7981.

Computers

TRS Model I, 48K w/doubler and RS232, green screen TAXAN monitor and two double sided double density disk drives, powerful operating systems and software, \$800. Call Phil, x2876 or 488-4453.

Household

Girl's bedroom suite, yellow and white French Provincial, twin beds, excellent condition. Call 280-6969 or 482-0509.

Sofa and chair, \$150; two recliners, \$50 and \$20; dinette set, \$75; 25" RCA color console, \$50. Call Beck, x2071.

Beautiful Drexel extra-long sofa, seats four easily, recently recovered in light brown and rust floral print fabric, \$150. Call Welch, x5111 or 480-5194.

30" gas Hardwick stove, never used, harvest gold with glass oven door, \$200. Call 422-0571.

Panasonic 17" B&W TV, \$45; twin mattress, \$25. Call Julie, x3445.

Chrome/glass coffee table, etagere; brown velvet sofa. Call 333-3177 after 5:30 p.m.

Antique sofa and chair in very good condition, \$150 for sofa and \$60 for chair. Call 643-8944 after 6 p.m.

Car Pools

Need a ride from Fairwind Apartments on Space Center to NASA, 8 a.m. to 4:30 p.m., will pay for gas. Call Deb, x5595.

Wish to form carpool from Liberty or Dayton to Bldg. 30. Call Vic Gambill, x4810 or 336-2927.

Wish to form carpool from Katy to Bldg. 30. Call John Martin, x4198, 391-6126 or 578-9955.

Wish to form carpool from Brazosport area to Bldg. 30. Call Ziman, 409-297-5502.

Wanted

Want large fiberglass dog kennel, suitable for shipping a Lab or Weimaraner. Call Dave Dunn, 486-0808 after 5 p.m.

Want roommate to share large house, responsible non-smoker, near NASA, \$300/mo. Call 474-7246.

Want to buy electric trains. Call Don, x2449.

Want to buy 19 cu. in. refrigerator, side by side, frost free, with water and

ice dispenser, almond or white. Call 409-986-5214 between 7 a.m. and 10 p.m.

Want to buy used drafting table priced within reason. Call Cliff Meyer, 480-5132 or 943-7054.

Lost

Lost in Bldg. 1, gold tie tack, oval shape. Call Dennis, x2337.

Miscellaneous

Free kittens, indoor or outdoor cats, will be good mousers. Call 482-3989 after 5 p.m.

Clarinet, excellent beginner instrument, one year old, good condition, \$175. Call 538-4766.

Piano lessons given in home, very close to JSC, \$10 per lesson. Call Annette, 480-0116/

Four 14 inch wheels and hubcaps for Chrysler product, tires usable but in poor shape, \$10 each. Call Dave, 486-0808.

Ladies golf bonanza: P, 3, 4, 5, 6, 7, 8, 9 irons (Wilson); 1, 3, 5 woods; like new 8AA shoes, pull cart bag combination, like new. Call J. Poindexter, x4241 or 474-7769.

Tan carpet and pad, 900 sq. ft., 3 years old, make offer. Call 334-4894.

Baby carriage, very good condition, \$50. Call 488-6521.

* Want to go sailing? Join the JSC Sailing Club. First organizational meeting is Nov. 1 at 5:15 in the Rec Center Lounge. Call Peacock at 488-4920 for more information.